



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,904	05/18/2006	Hajime Igarashi	HGM-001	8765
20374 7590 06/24/2011 KUBOVCIK & KUBOVCIK SUITE 1105 1215 SOUTH CLARK STREET ARLINGTON, VA 22202				
EXAMINER MOYER, DALE S				
ART UNIT		PAPER NUMBER		
3664				
MAIL DATE		DELIVERY MODE		
06/24/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/595,904

**Applicant(s)**

IGARASHI ET AL.

**Examiner**

DALE MOYER

**Art Unit**

3664

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Application***

1. This final office action is in response to applicants' amendment received by the United States Patent and Trademark Office on 09 May 2011.
2. Claims 1-31 have been presented in the application, of which, claims 1-29 are cancelled and claims 30-31 are new. Accordingly, pending claims 30-31 are addressed herein.

### ***Response to Arguments***

3. The applicants' arguments with respect to claims 30-31 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Regarding claim 30**, the words "the previously set value" on line 20 render the claims indefinite. That is, the claim is indefinite because it is unclear whether the words are referring to the instance of "a previously set value" on lines 16-17 or the instance of "a previously set value" on lines 18-19.

Additionally or alternatively, the limitations reciting "the required warning conditions include all of (a), (b) and (c)" and "(b) either when the vehicle speed drops

below a previously set value, or when the vehicle speed exceeds a previously set value and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time" render the claim indefinite. That is, the claim is indefinite for one or more of the following reasons: i) the required warning conditions include "all" of (b), however limitation (b) includes the word "either". Therefore the claim is indefinite because it is unclear whether "all" of the conditions of (b) must be satisfied or whether "either" of the conditions of (b) must be satisfied; ii) the claim is indefinite because it is unclear whether the claim requires that "the vehicle speed drops below a previously set value [...] and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time" or whether the claim requires that "the vehicle speed exceeds a previously set value and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time" or whether the claim requires that "the vehicle speed drops below a previously set value and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time" or "the vehicle speed exceeds a previously set value and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time".

It is noted that if the instances of "a previously set value" were renamed to "a first previously set value" and "a second previously set value" and the dependent limitations were amended accordingly, the indefiniteness would be resolved.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami et al. (US 6,052,644).

**Regarding claim 30**, Murakami et al. teach a fuel saving management system comprising, on a motor vehicle:

information detectors for detecting, respectively, vehicle speed (Fig. 2, element 50), engine speed (Fig. 2, element 52), and a fuel flow rate ("measuring fuel flow rate" see column 3, line 44) as information on a running state of the vehicle (column 3, line 26 through column 4, line 14);

an information processing-device (Fig. 3, element 60, "ICU") for processing the information detected by the information detectors (column 4, line 66 through column 5, line 2; column 5, lines 25-33), the information-processing device also generating a warning to a driver (Fig. 3, element 72; Figs. 4-5; Fig. 6, element 126; "[the ICU] displays messages to prompt the driver when it detects that excess fuel is being consumed" see column 6, lines 32-42) when the vehicle speed, the engine speed and the fuel flow rate satisfy required warning conditions; and

an information storage device (Fig. 3, element 62) storing count values;

wherein the required warning conditions include all of (a), (b), and (c) below:

- (a) when the engine speed exceeds a required warning value ("RPM>ESL" column 15, line 28 through column 16, line 36);
- (b) either when the vehicle speed drops below a previously set value (2 MPH; column 16, lines 25-48), or when the vehicle speed exceeds a previously set value ("V is greater than 15") and the time during which the vehicle speed exceeds the previously set value is less than or equal to a previously set time ("n is less than 250" column 9, lines 30-67); and
- (c) when a fuel flow rate exceeds a previously set value (column 11, lines 30-33; column 13, line 55-column 14, line 45; column 21, lines 50-55);

wherein the information-processing device stores a count value (Table 4, element n) into the information storage device when a time during which the vehicle speed, the engine speed and the fuel flow rate satisfy the required warning conditions exceeds a previously set time.

It is noted that the value of counter n is updated regardless of whether or not the vehicle speed, engine speed and fuel flow rate satisfy the required warning conditions. Thus, it is inherent that the count value is updated/stored "when a time during which the vehicle speed, the engine speed and the fuel flow rate satisfy the required warning conditions exceeds a previously set time."

**Regarding claim 31**, Murakami et al. teach a fuel-saving management system comprising, on a motor vehicle:  
information detectors for detecting, respectively the vehicle speed (Fig. 2, element 50) and an accelerator angle (Fig. 2, element 56; Fig. 8, element 188);

an information-processing device (Fig. 3, element 60) for processing the information detected by the information detectors (column 4, line 66 through column 5, line 2; column 5, lines 25-33), the information-processing device also generating a warning to a driver (Fig. 3, element 72; Figs. 4-5; Fig. 6, element 126; "[the ICU] displays messages to prompt the driver when it detects that excess fuel is being consumed" see column 6, lines 32-42) when the vehicle speed and the accelerator angle satisfy required warning conditions; and

an information storage device (Fig. 3, element 62) storing count values (Table 4, "n"; "counter");

wherein the required warning conditions include all of:

when the vehicle speed exceeds a required warning value (#); and

when the accelerator angle exceeds a previously set value (column 14, lines 46-62);

wherein the information processing device stores a count value (Table 4, "n" "counter") into the information storage device when a time during which the vehicle speed and the accelerator angle satisfy the required warning conditions exceeds a previously set time.

It is noted that the value of counter n is updated regardless of whether or not the vehicle speed, engine speed and fuel flow rate satisfy the required warning conditions. Thus, it is inherent that the count value is updated/stored "when a time during which the vehicle speed, the engine speed and the fuel flow rate satisfy the required warning conditions exceeds a previously set time."

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DALE MOYER whose telephone number is (571)270-7821. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on (571)272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dale Moyer/  
Examiner, Art Unit 3664

/KHOI TRAN/  
Supervisory Patent Examiner, Art Unit 3664